

		A helix		I/C helix	
SWMb	VI	-----SPEGEWQIQLHVWAKVEADVA-----		-----GHDQDILNLRLKSHKSHETLEK	
HemAT-Hs		MSNDNDTLVTADVRNGIDGHALADRIGIDE--		-----AEIAWRLSFTGTDODDTMAALAEEQPLBEAT	42
HemAT-Bs		LIFLKDKRKQETAXFSDSNGQKRN-RIQFTNKHA	ADVKKQLKVMVRUGDAELIVL	EQLOQPIHQN	60
		D helix	E helix	F helix	61
SWMb	*	-----FDREKHLKTEAEMKASEDLKKHGVTVL--	TALGAIKK-KGRHEAE-----	LKPWQS	
HemAT-Hs		ADAVVTDF--YDHLESYERTODLFANSTKTVEOLKETQAEAYLLCLGRGEYDTEYAAQRARATGK			92
HemAT-Bs		IVNLEVDASF--YKNLDHESSLMDDII-NDHSSVDRLKOTLKRHIQEMFAGVIEDDEFIEKRNRIAS			122
	*	G helix	H helix		122
SWMb	*	HATKHKIPIKYIEFISEAIIHVLHSRHPGDEGADAOGAMNKALELFRKDIAA-KYKELGYOG			153
HemAT-Hs		HDVIGLGLPDVYLGAYTRYVTCILLDALADDVVA	DRGEEAAAADVDELVAFRFILEMLKLTEDQO		184
HemAT-Bs		HIRIGLTPKWWMGAPOELLMSMIDY-----	EASITNQOELLKAIKATTKILNLEQQI		175
SWMb	SEQ. ID. No. 76				
HemAT-Hs	SEQ. ID. No. 77				
HemAT-Bs	SEQ. ID. No. 78				

		K1		
Tsr	LMRTVGDVRNGANAIYSGASPIATGNNDLSSRTEQQAASLEETAASMEQITATVQNAENAR	***	***	***
HemAT-Hs	LEATSDQVAERTDTMRARTDDQVDRMADVSREISSVSASVVEVASTADDVRRTSEDAEALAQ			
HemAT-Bs	LHKQKQETSGSIANLSETSRSVQELVDKSEGQASQASKAGTVTSSTVEEKSIGGKELEVQO			
		HCD		
Tsr	QASHIALSASETAQRGGKWWDNVQTMRDISTSSQKIAIDITSVIDGIAFOTNLLALNAAVEA			
HemAT-Hs	QGEAAADDALATMEDIIDEATDGVTAGVEQLGERADVESTGVIDDIAEQTNMLALNASIEA			
HemAT-Bs	K-----QMNKIDTSLVQIEKEMVKIDEIAQKIEKIFGIVTGIAEQTNILSILNASIES			
		HCD		
Tsr	ARAGEOGRGFIAVVAGEVRNLQAORSQAQAREIJKSLIEDSVGKVDVGSTLVESSAGETMAEVSP			
HemAT-Hs	ARAGEAEGEFAVVADEVKALAAEESREQSTRVEELIVEQMOAETEETVDOOLDEVNORIGEGVER			
HemAT-Bs	ARAGEHCKGFIAVVANEVRKLSEDTKKTSTVSTVSEILV-----NNNTNTQINIVSKHIKDVNEL			
		R1		
Tsr	VTRYTDIMGETASASASDEOSRGIDQVGLAVAEMDRVTQDQAAALVEEESAAAAAALEEOASRLTE	**		
HemAT-Hs	VEEAMETDQEITDAVEADAASGMOEVSTATDEQAVSTEEVAEMVPGVDRAGEAAADDDEAD			
HemAT-Bs	VSESKEKMTQINRLEDEIVHSMKITSKEQSFGKIDVDLQAFGLGLOEVSRAYSHVAASVDSLVI			
		R1		
Tsr	AVAVFRIOQQORETSAVVKTVTDPAP	SEQ.	ID.	No. 79
HemAT-Hs	AT-----DQOVRTVEEVRETVGKLS	SEQ.	ID.	No. 80
HemAT-Bs	LT-----EE	SEQ.	ID.	No. 81

FIGURE 1

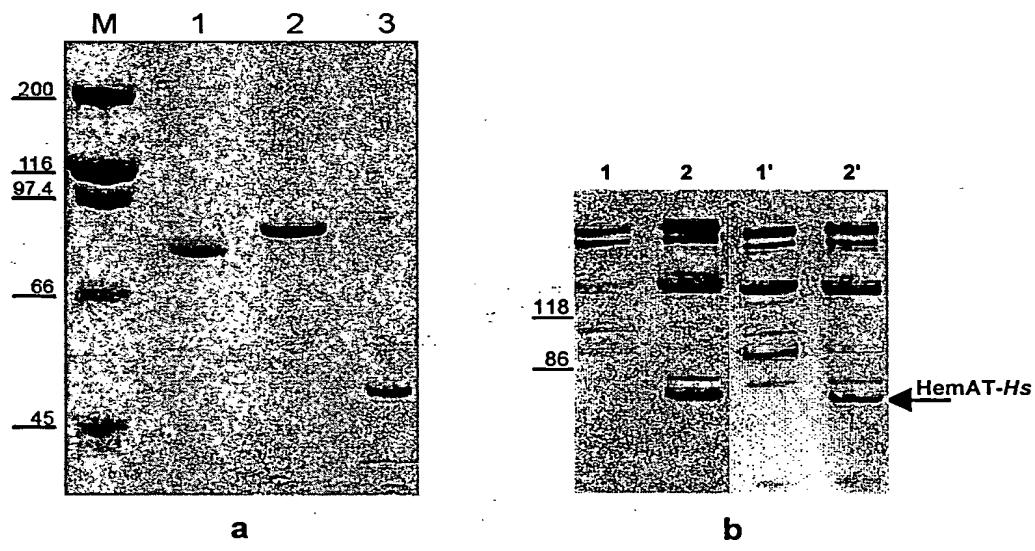


FIGURE 2

Myoglobin-like Protein (MbLP)

M1-box SEQ. ID. No. 82	XXXXXXXXXXXXXXXXXXXXXXXXXXXX	M2-box SEQ. ID. No. 83
TEMPLATE		
H-box SEQ. ID. No. 84	M1-box SEQ. ID. No. 85	M2-box SEQ. ID. No. 86
GQDVLVVLIKXHPLIQEKIXXFDFFKH	GQDVLVVLIKXNPEIQEKFFFFKH	AQRXRLAQIHAXKGKIPDWYL

Figure 1 The two sequences used in the analyses. M1 and M2 are the site of myoglobin recognition. M2 is the site of HemAT recognition. The H-box is the site primarily of microbial hemoglobin recognition.

FIGURE 3

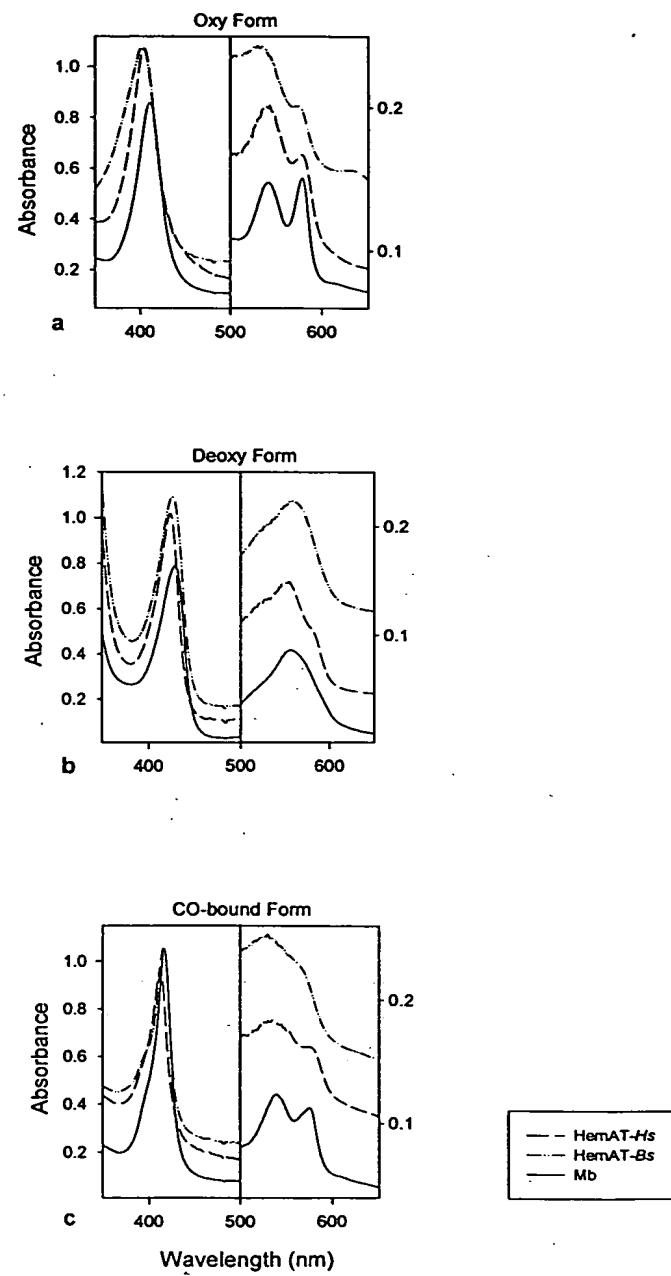


FIGURE 4

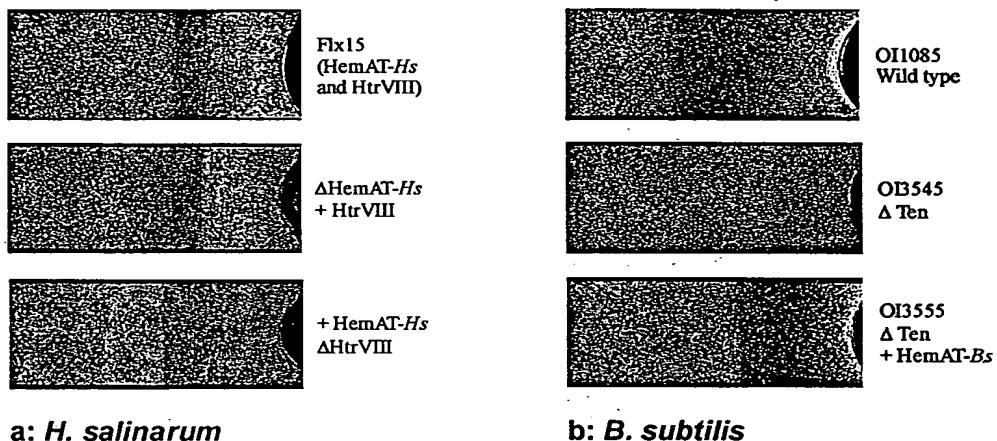


FIGURE 5

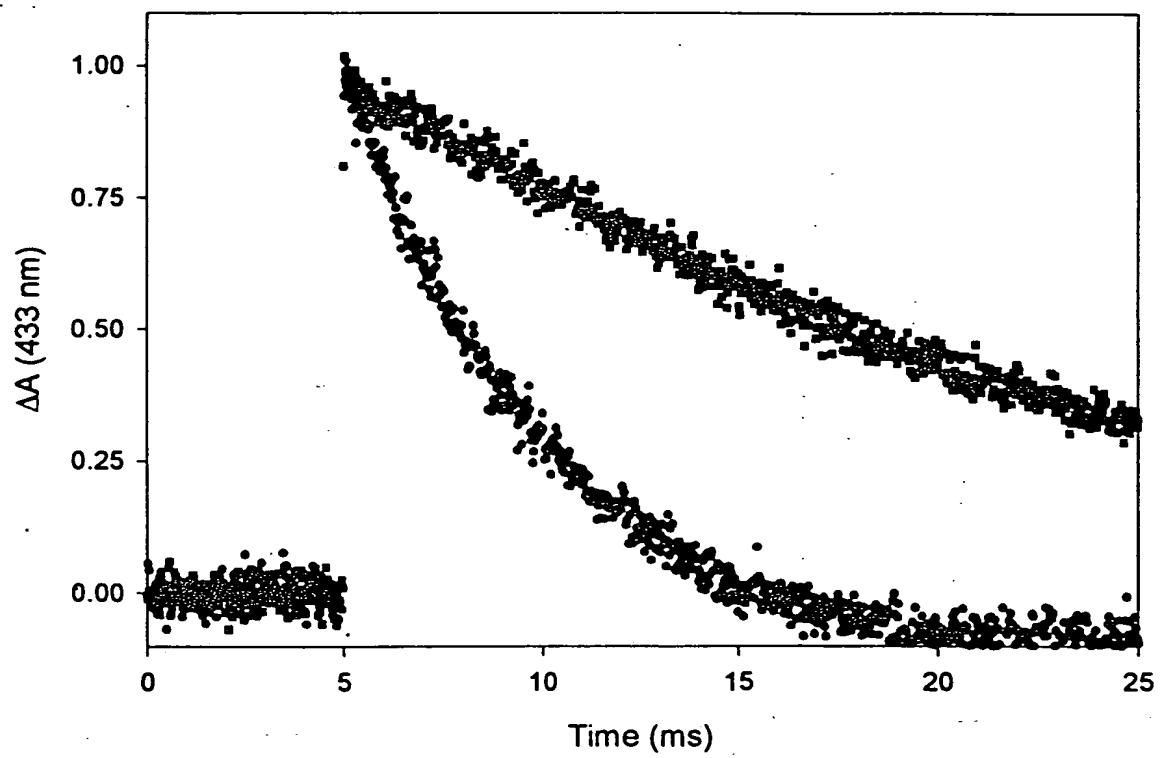


FIGURE 6

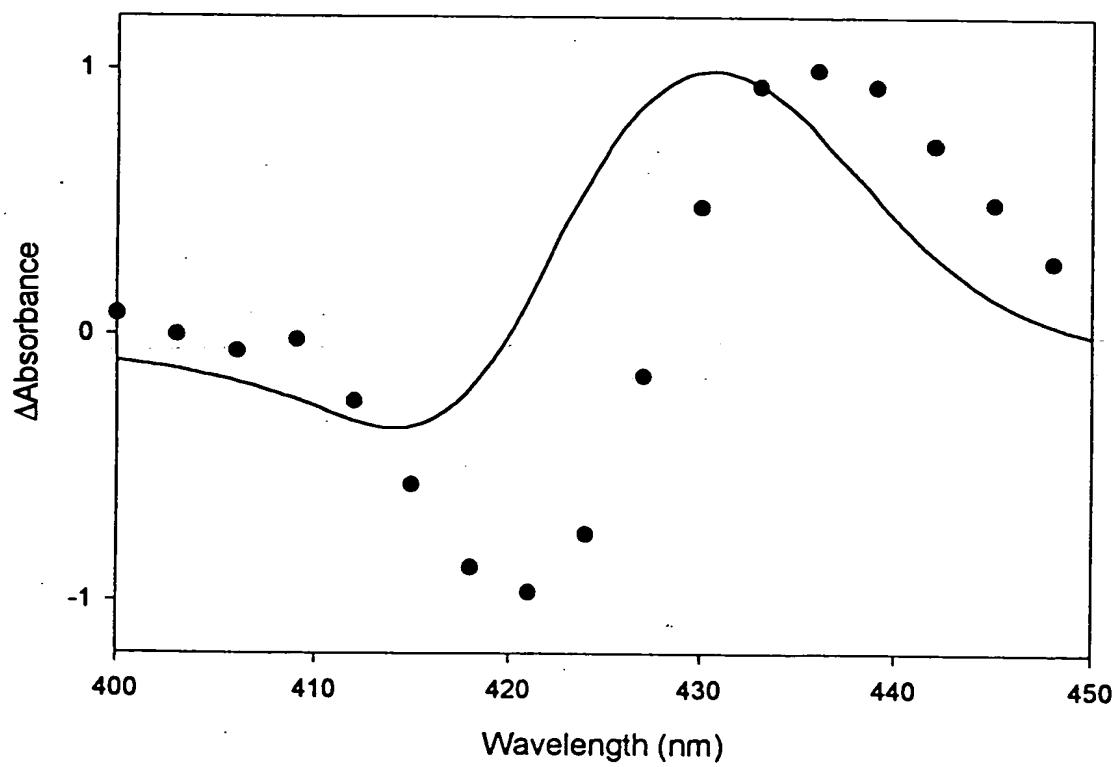
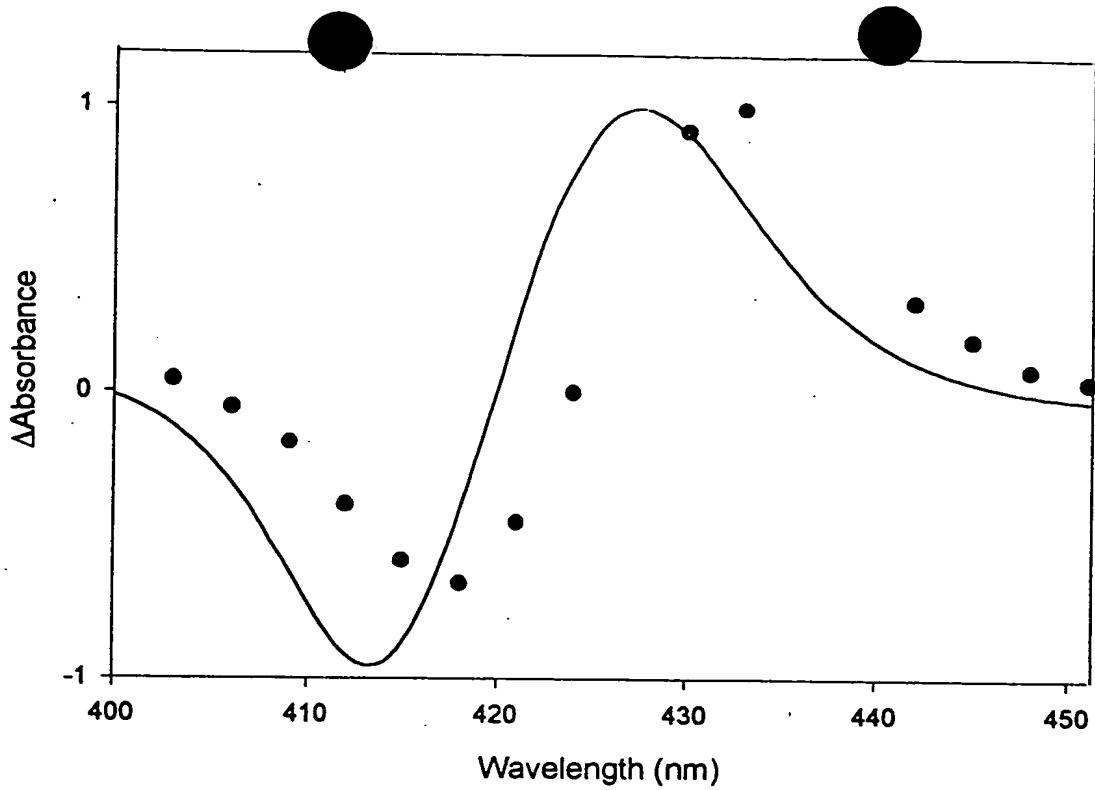


FIGURE 7

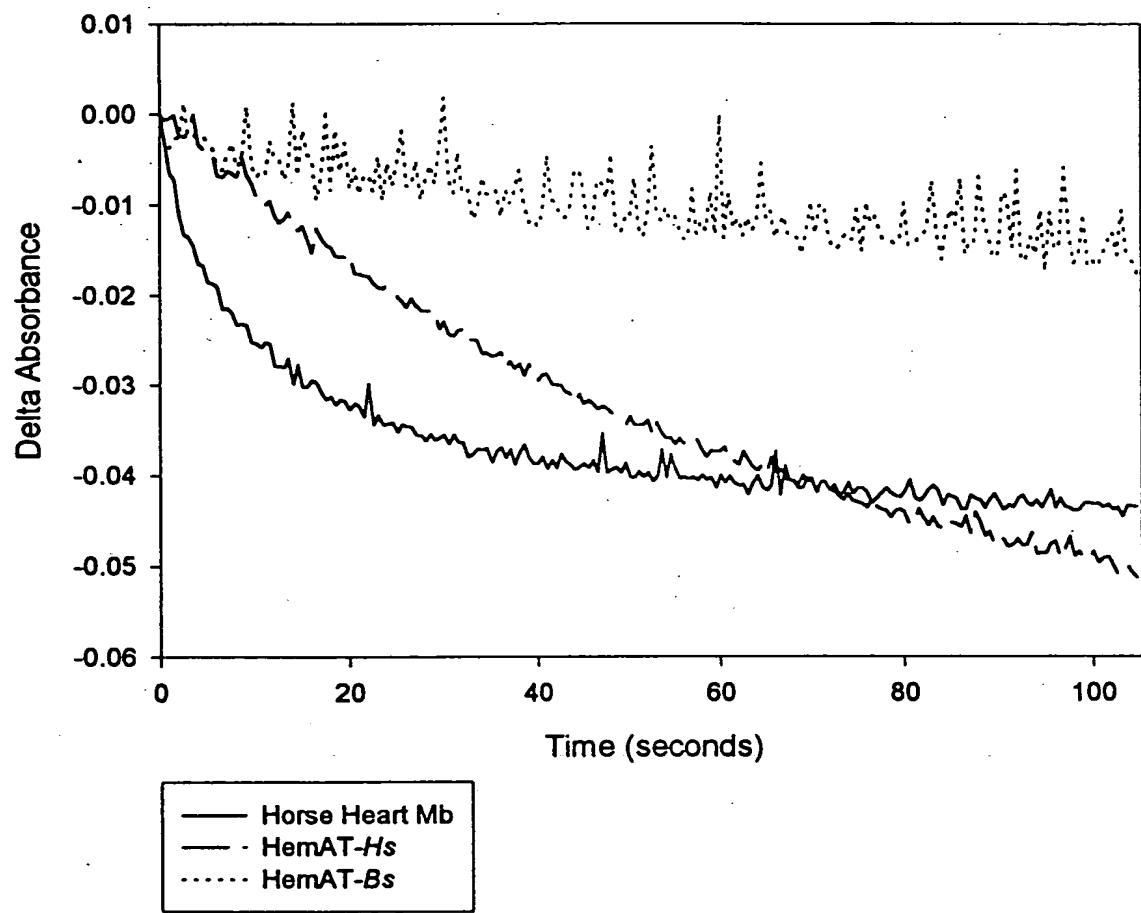


FIGURE 8